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Rumours Built on Quicksand

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Table 1 – Daily Abnormal Price Return, Trade Volume, Post Volume and Sentiment Measures during the Observation Period

Notes: t-stat figures for each variable are provided within brackets below the data values. AR = Abnormal Return, ATV = Abnormal Trading Volume, APV = Abnormal Posting Volume, AS = Abnormal Sentiment, BI = Bullishness Index and MBI = Modified Bullishness Index. AR, ATV and APV are expressed in percentage terms whereas the three measures of sentiment are expressed as decimals for comparison. “Event Description” refers to relevant news and company announcements that occurred before, or during trading hours. News and announcements occurring after the close of the AIM submarket of the London Stock Exchange are reflected in the Event Description for the following day.

Date	Day	AR	ATV	APV	AS	BI	MBI	Event Description
04 April 2014	d-10	5.78% (1.13)	-34.46% (-0.33)	-45.08% (-1.58)	-0.01 (-0.05)	0.07	0.25	Institutional Investor, FMR LLC, increases holding in QPP shares to >5%
07 April 2014	d-9	12.61% (2.47)	168.10% (1.60)	1.90% (0.07)	0.22 (1.97)	0.22	0.91	QPP circulates announcement of "the world's largest telematics contract to date" in a JV with automotive services company RAC Limited
08 April 2014	d-8	-1.92% (-0.38)	-71.26% (-0.68)	-31.51% (-1.10)	0.09 (0.83)	0.11	0.52	
09 April 2014	d-7	0.67% (0.13)	-77.21% (-0.73)	-50.37% (-1.76)	0.24 (2.17)	0.13	0.43	
10 April 2014	d-6	0.49% (0.10)	17.12% (0.16%)	-49.05% (-1.72)	0.20 (1.82)	0.16	0.64	
11 April 2014	d-5	-2.30% (-0.45)	-37.49% (-0.36)	-61.95% (-2.17)	0.19 (1.73)	0.16	0.67	
14 April 2014	d-4	-3.81% (-0.75)	101.89% (0.97)	-60.63% (-2.12)	0.03 (0.30)	0.12	0.49	
15 April 2014	d-3	-7.02% (-1.38)	79.80% (0.76)	-32.51% (-1.14)	0.13 (1.20)	0.16	0.54	
16 April 2014	d-2	0.66% (0.13)	-15.75% (-0.15)	8.19% (0.29)	0.09 (0.78)	0.08	0.27	QPP releases Q1 Trading Statement, "exceeding market expectations in all key performance indicators"
17 April 2014	d-1	3.46% (0.68)	-53.12% (-0.50)	-60.63% (-2.12)	0.40 (3.57)	0.24	0.90	
22 April 2014	d	-39.46% (-7.74)	925.65% (8.80)	294.38% (10.31)	-0.27 (-2.48)	-0.09	-0.32	GCR publish tweet linking to dossier; "A Country Club Built on Quicksand"
23 April 2014	d+1	12.44% (2.44)	-82.61% (-0.79)	189.16% (6.62)	-0.19 (-1.71)	-0.05	-0.19	
24 April 2014	d+2	-6.60% (-1.29)	-22.92% (-0.22)	100.83% (3.53)	-0.03 (-0.28)	0.02	0.08	
25 April 2014	d+3	-1.60% (-0.31)	119.71% (1.14)	314.89% (11.03)	-0.06 (-0.55)	0.01	0.03	Quindell PLC publish detailed rebuttal to GCRs claims
28 April 2014	d+4	-18.37% (-3.60)	-15.81% (-0.15)	220.26% (7.71)	-0.24 (-2.19)	-0.07	-0.27	GCR publishes several tweets defending its claims, asserting that "Quindell's worst nightmare is the truth". Three QPP Directors increase personal holdings in QPP shares

Date	Day	AR	ATV	APV	AS	BI	MBI	Event Description
29 April 2014	d+5	17.27% (3.39)	-84.89% (-0.81)	112.08% (3.92)	-0.12 (-1.07)	-0.01	-0.06	Four QPP Directors increase personal holdings in QPP shares
30 April 2014	d+6	6.41% (1.26)	8.11% (0.08)	15.47% (0.54)	-0.06 (-0.54)	0.01	0.06	One Person Discharging Managerial Responsibility (PDMR) increases personal holding in QPP shares
01 May 2014	d+7	-6.01% (-1.18)	-57.55% (-0.55)	24.73% (0.87)	-0.02 (-0.17)	0.02	0.07	One PDMR increases personal holding in QPP shares
02 May 2014	d+8	-2.35% (-0.46)	40.15% (0.38)	29.03% (1.02)	0.13 (1.18)	0.11	0.46	QPP announces major contract extension with "leading UK broker"
06 May 2014	d+9	-6.46% (-1.27)	42.71% (0.41)	27.05% (0.95)	0.02 (0.17)	0.07	0.27	
07 May 2014	d+10	-10.22% (-2.01)	-17.00% (-0.16)	103.8% (3.64)	-0.21 (-1.94)	-0.05	-0.21	Company publishes announcement of telematics rollout in Canada
08 May 2014	d+11	-0.44% (-0.09)	9.81% (0.09)	120.02% (4.20)	-0.02 (-0.22)	0.03	0.15	
12 May 2014	d+12	7.86% (1.54)	-46.12% (-0.44)	10.50% (0.37)	0.00 (0.03)	0.02	0.08	GCR reiterates "strong sell" rating via <i>Twitter</i>
13 May 2014	d+13	-3.92% (-0.77)	79.37% (0.75)	70.39% (2.46)	-0.32 (-2.92)	-0.14	-0.77	
14 May 2014	d+14	2.37% (0.46)	-67.27% (-0.64)	-39.45% (-1.38)	0.00 (0.00)	0.04	0.16	
15 May 2014	d+15	2.17% (0.43)	13.17% (0.13)	0.91% 0.03	-0.26 (-2.31)	-0.10	-0.38	One PDMR increases personal holding in QPP shares
16 May 2014	d+16	4.38% (0.86)	-29.52% (-0.28)	-29.86% (-1.05)	0.16 (1.41)	0.12	0.53	
19 May 2014	d+17	-4.44% (-0.87)	31.72% (0.30)	-11.33% (-0.40)	-0.12 (-1.05)	-0.02	-0.07	
20 May 2014	d+18	-3.21% (-0.63)	-22.55% (-0.21)	-23.90% (-0.84)	-0.14 (-1.30)	-0.01	-0.05	
21 May 2014	d+19	-1.39% (-0.27)	-6.21% (-0.06)	-58.64% (-2.05)	-0.22 (-1.96)	-0.06	-0.19	
22 May 2014	d+20	1.09% (0.21)	23.14% (0.22)	-14.64% (-0.51)	-0.03 (-0.25)	0.02	0.11	

Table 2 – 5-Minute Abnormal Price Return, Trade Volume, Post Volume and Sentiment Measures during the Observation Period on Day *d*

Notes: t-stat figures for each variable are provided within the brackets below the values. AR = Abnormal Return, ATV = Abnormal Trading Volume, APV = Abnormal Posting Volume, AS = Abnormal Sentiment, BI = Bullishness Index and MBI = Modified Bullishness Index. AR, ATV and APV are expressed in percentage terms whereas the three measures of sentiment are expressed as decimals for comparison. “Event Description” refers to relevant news and company announcements that occurred within the 5-minute period.

Time (GMT)	AR	ATV	APV	AS	BI	MBI	Event Description
12:30:00	-1.26% (-2.19)	515.07% (2.99)	89.86% (0.26)	-0.33 (-0.83)	-0.33	-0.69	
12:35:00	-2.57% (-4.49)	864.20% (5.01)	89.86% (0.26)	0.00 (-0.09)	0.00	0.00	
12:40:00	-1.96% (-3.42)	1005.53% (5.83)	279.72% (0.82)	0.33 (0.64)	0.17	0.69	
12:45:00	1.33% (2.33)	136.95% (0.79)	89.86% (0.26)	0.00 (-0.09)	0.00	0.00	
12:50:00	-3.30% (-5.75)	1235.08% (7.17)	-36.71% (-0.11)	0.00 (-0.09)	0.00	0.00	
12:55:00	1.37% (2.39)	332.66% (1.93)	406.29% (1.19)	0.00 (-0.09)	0.00	0.00	
13:00:00	-0.67% (-1.17)	70.47% (0.41)	279.72% (0.82)	1.00 (2.12)	0.50	1.39	GCR publishes tweet linking to research dossier at 1:02pm GMT
13:05:00	-2.04% (-3.56)	563.76% (3.27)	279.72% (0.82)	-0.17 (-0.46)	0.00	0.00	
13:10:00	-2.78% (-4.86)	1074.99% (6.24)	659.43% (1.94)	-1.08 (-2.49)	-0.42	-1.25	
13:15:00	-9.98% (-17.42)	1726.56% (10.02)	659.43% (1.94)	-1.25 (-2.86)	-0.58	-1.20	
13:20:00	-2.39% (-4.17)	111.10% (0.64)	849.29% (2.49)	-0.07 (-0.24)	0.07	0.22	
13:25:00	-18.69% (-32.62)	948.05% (5.50)	722.72% (2.12)	-0.15 (-0.43)	-0.08	-0.29	
13:30:00	-9.00% (-15.71)	5377.01% (31.20)	975.86% (2.87)	-0.24 (-0.62)	-0.06	-0.29	
13:35:00	-5.47% (-9.55)	4072.09% (23.63)	532.86% (1.56)	-0.60 (-1.42)	-0.30	-0.92	
13:40:00	-9.31% (-16.25)	765.98% (4.44)	659.43% (1.94)	-0.75 (-1.76)	-0.33	-0.69	
13:45:00	-5.14% (-8.96)	1353.69% (7.85)	1229.01% (3.61)	-0.81 (-1.89)	-0.43	-1.39	
13:50:00	0.00% (0.01)	5184.33% (30.08)	1102.43% (3.24)	-0.21 (-0.56)	0.00	0.00	
13:55:00	13.51% (23.57)	5592.53% (32.45)	1292.29% (3.79)	-0.36 (-0.90)	-0.18	-0.85	

Table 3 – Spearman Rank Correlation of Online Sentiment and Abnormal Returns

Notes: A */** indicates significance to the 5%/1% level respectively. The figures in *Panel A* indicate the Spearman's rank correlation between abnormal returns and change in sentiment across the specified time periods. Time periods are expressed in minutes (M), hours (H) and days (D). The figures presented in *Panel B* indicate the Spearman's rank correlation between Abnormal Returns and changes in each Sentiment measure. "Sent Lag" represents correlation when lagging the "Change in Sentiment" variable by -1 day. "Return Lag" represents correlation when lagging the "Abnormal Return" variable by one day. "No lag" represents correlation when no lag effect is employed.

Panel A: 5-Minute Sentiment Change and Abnormal Returns Following Publication of GCR's Dossier

	Abnormal Return Lag					No Lag	Change in Sentiment Lag				
	+1H	+30M	+15M	+10M	+5M		+5M	+10M	+15M	+30M	+1H
15M	-	-	-	-	1.00**	0.50	-1.00	-	-	-	-
30M	-	-	-0.50	0.00	-0.10	0.09	-0.90*	-0.80	-0.50	-	-
45M	-	-0.50	-0.09	0.21	-0.02	0.03	-0.76*	-0.18	-0.14	0.50	-
1H	-	0.43	-0.17	0.20	0.23	0.18	-0.64*	-0.18	-0.08	0.03	-
2H	-0.17	-0.06	-0.04	0.20	0.07	0.26	-0.08	-0.07	-0.09	0.09	0.02
3H	-0.08	0.02	-0.10	0.12	0.08	0.25	-0.01	-0.07	-0.14	0.02	-0.15
1D	-0.04	-0.11	-0.11	0.10	-0.03	0.12	-0.09	0.02	0.06	-0.02	-0.03
2D	-0.01	0.01	-0.09	0.11	-0.10	0.13	-0.07	-0.02	0.02	-0.04	0.08
3D	-0.07	-0.04	-0.01	0.06	-0.11	0.15**	-0.07	-0.05	0.08	0.02	0.04

Panel B: Daily Sentiment Change and Abnormal Returns during Observation Window

	<u>Abnormal Return</u>		
	Change in AS	Change in BI	Change in MBI
<u>No Lag</u>			
All Days	0.55**	0.52**	0.54**
d-10 → d-1	0.58*	0.55*	0.53
d → d+10	0.63*	0.66*	0.66*
d → d+20	0.54*	0.52*	0.52*
<u>Sent Lag (-1D)</u>			
All Days	-0.22	-0.23	-0.25
d-10 → d-1	0.13	0.03	-0.17
d → d+10	-0.36	-0.39	-0.39
d → d+20	-0.32	-0.35	-0.33
<u>Return Lag (-1D)</u>			
All Days	-0.15	-0.17	-0.17
d-10 → d-1	0.17	0.15	0.28
d → d+10	-0.03	-0.07	-0.07
d → d+20	-0.26	-0.28	-0.32